#### GOVERNMENT OF THE DISTRICT OF COLUMBIA

#### District Department of the Environment

**Air Quality Division** 



## FACT SHEET AND STATEMENT OF BASIS FOR PROPOSED PERMITTING ACTION UNDER 20 DCMR 300 (TITLE V-OPERATING PERMIT PROGRAM)

This "Fact Sheet and Statement of Basis" has been prepared pursuant to 20 DCMR 303.1(c) and 40 CFR 70.7(a)(5).

#### **PERMIT NO. 017-R2**

#### **APPLICANT AND PERMITTEE:**

Armed Forces Retirement Home - Washington 3700 North Capital Street, NW Washington, DC 20317

#### **FACILITY LOCATION:**

Armed Forces Retirement Home - Washington 3700 North Capital Street, NW Washington, DC 20317

#### **FACILITY DESCRIPTION:**

Armed Forces Retirement Home operates several boilers and emergency generators to provide heating, cooling and emergency backup power to buildings that house retired military personnel in the District of Columbia. This facility is located at 3700 North Capitol Street in the northwest quadrant of the District. The facility consists of many buildings that share the site. The primary emission sources in these buildings are boilers and emergency generators. The Permittee is covered under Standard Industrial Classification (SIC) Code 8361.

This facility includes emission units that are capable of operating twenty-four (24) hours per day, seven (7) days per week, and fifty-two (52) weeks per year. The units consist of two (2) 54.38 million BTU per hour English boilers, model ALL-45-250; one 36.26 million BTU per hour English boiler, model ALL-30-250; and seven (7) emergency generators. The boilers are equipped with Continuous Emissions Monitoring (CEM) Systems for the monitoring of NOx, O2 and opacity.





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This facility has made the following physical changes since 2004 Permit renewal:

- Emission units B4, B7, and B10 (Emergency Generators) have been decommissioned.
- Emission Unit B11 (Emergency Generator) was replaced in 2007 with 50kW diesel fired generator and located outside the Sherman building.
- Fuel Tanks C16, C18, C19, and C20 have been removed.
- Fuel Tank C21, fuel source for B11 has been added.
- Degreasing operations identified as F2 and F6 have been removed.
- Sterilization operations identified as G1 is being accomplished by use of steam autoclave rather than chemically; therefore, this operation is no longer a Title V activity.
- All ozone depleting substance have been removed from the facility.

The source requested the following changes:

- That the lead content requirement of gasoline sold be removed since there is no gasoline tank in the facility.
- That the protection of stratospheric ozone requirement be removed because all Class I and Class II substances have been removed from the facility.

The above changes were not made because they are standard permit conditions regardless of whether or not they are applicable to a particular facility.

#### **EMISSIONS SUMMARY:**

Plantwide Emissions Summary (tons per year)	
Pollutant	<b>Potential Emissions</b>
Sulfur Dioxide (SO <sub>2</sub> )	108.3
Oxides of Nitrogen (NO <sub>x</sub> )	91.20
Particulate Matter (PM/PM10)	15.16
Volatile Organic Compounds (VOCs)	7.64
Carbon Monoxide (CO)	30.19
Total Hazardous Air Pollutants (HAPs)	1.20

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#### BASIS OF 20 DCMR CHAPTER 3 (TITLE V) APPLICABILITY:

This facility has the potential to emit 91.20 tons per year of oxides of nitrogen (NO<sub>x</sub>) and 108.3 tons per year of sulfur dioxide. This source is a major source of NOx and SO2 because the potential to emit these two pollutants are more than 25 and 100 tons per year, respectively. As such, pursuant to 20 DCMR 300.1(a), the source is subject to Chapter 3 and must obtain an operating permit in accordance with that regulation and Title V of the federal Clean Air Act.

#### LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The conditions contained in the Title V operating permit are based on underlying requirements of 20 DCMR as well as various federal regulations promulgated pursuant to the federal Clean Air Act. The regulations that are the basis of each condition are cited in the permit, except that conditions added to make another condition, with a direct underlying regulation, enforceable as a practical matter may, in some cases, not have a specific citation. These latter, un-cited conditions generally consist of monitoring, record keeping, and reporting requirements authorized under 20 DCMR 500.1.

The permit has been developed to incorporate the requirements of all applicable requirements as defined in 20 DCMR 399.1 along with additional conditions necessary to make all such requirements enforceable as a practical matter.

Any condition of the draft Title V Permit that is enforceable by the District but is not federally-enforceable is identified in the Title V permit as such with an asterisk.

It should also be noted that this permit will be issued to include updated requirements established pursuant to 20 DCMR Chapter 2. As such, it will be issued for public notice as a merged permit under the authority of both Chapters 2 and 3.

#### **REGULATORY REVIEW:**

This facility has been found to be subject to the requirements of the following regulations:

#### Federal and District Enforceable:

- 20 DCMR Chapter 1 General Rules
- 20 DCMR Chapter 2 General and Non-Attainment Area Permits
- 20 DCMR Chapter 3 Operating Permits and Acid Rain Programs
- 20 DCMR 500 Records and reports
- 20 DCMR 502 Sampling, tests, and measurements.
- 20 DCMR 600 Fuel burning particulate emission.
- 20 DCMR 604 Open Burning
- 20 DCMR 605 Control of Fugitive Dust
- 20 DCMR 606 Visible Emissions
- 20 DCMR 764 Solvent Cleaning Cold Cleaning

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- 20 DCMR 800 Control of Asbestos
- 20 DCMR 801 Sulfur Contents of Fuel Oils
- 20 DCMR 803 Sulfur Process Emissions
- 20 DCMR 805 Reasonably Available Control Technology for Major Stationary Sources of the Oxides of Nitrogen
- 40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS)
- 40 CFR 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR 61.12 Credible Evidence
- 40 CFR 63, Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

#### **District Enforceable Only:**

- 20 DCMR 402 Chemical Accident Prevention
- 20 DCMR 900 Engine idling.
- 20 DCMR 901 Vehicular exhaust emissions.
- 20 DCMR 902 Lead Content of Gasoline
- 20 DCMR 903 Odorous or other nuisance air pollutants.

#### Chapter 2 Permits:

No Chapter 2 permits have been issued to this facility since the last Title V permit was issued.

#### Greenhouse Gas (GHG) Requirements:

Because Chapter 3 (Title V) was triggered by other pollutants, no evaluation was made to determine if the facility would trigger Title V applicability under the GHG Tailoring Rule. No modifications have been made to the source that would trigger PSD applicability under the GHG Tailoring Rule. Other than this requirement, there are no other applicable requirements related to GHGs at this time, therefore none were included in the permit.

# 40 CFR 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Because the three large boilers at the site are existing boilers that use fuel oil, the requirements of this NESHAP are applicable. Specifically, the facility is required submit an initial notification of applicability to the EPA, perform biennial boiler tune-ups (the requirement for which was changed to annual tune-ups in the permit due to a similar requirement in 20 DCMR 805, but which requires annual tune-ups), and to have performed a one-time energy assessment. All of these requirements have been included in the permit.

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#### **COMMENT PERIOD:**

Beginning Date: February 3, 2012 Ending Date: March 5, 2012

All written comments should be addressed to the following individual and office:

Stephen S. Ours, P.E. Chief, Permitting and Enforcement District Department of the Environment Air Quality Division 1200 First Street, NE, 5<sup>th</sup> Floor Washington, D.C. 20002

#### PROCEDURE FOR REQUESTING PUBLIC HEARING:

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The District shall grant such a request if it is deemed appropriate. The venue, date, and time for any public hearing shall be announced in the District Register and a daily newspaper.

### POINT OF CONTACT FOR INQUIRIES:

Olivia Achuko
Environmental Engineer
District Department of the Environment
Air Quality Division
1200 First Street, NE, 5<sup>th</sup> Floor
Washington, D.C. 20002
(202) 535-2997

**REVIEWS:** 

Prepared by:

Olivia Achuko

**Environmental Engineer** 

Approved by:

Stephen S. Ours, P.E.

Chief, Permitting and Enforcement